11) A method of any one of claims **1** to **7**, wherein the expression of RhoA is inhibited conferring hypersensitivity to doxorubicin.

12) A method of claim **11**, wherein said rare-cutting endonuclease has as target the gene under the NCBI Reference Sequence NM_001664 encoding for human RhoA enzyme.

13) A method of claim **11** or **12**, wherein said rare-cutting endonuclease targets a sequence of SEQ ID NO:1, or to a sequence having at least 95% identity with the SEQ ID NO:2.

14) A method of any one of claims **1** to **7**, wherein the expression of CDK5 is inhibited conferring hypersensitivity to bortezomib.

15) A method of claim **14**, wherein said rare-cutting endonuclease has as target the gene under the NCBI Reference Sequence NP_001157882 encoding for human CDK5 enzyme.

16) A method of claim **14** or **15**, wherein said rare-cutting endonuclease targets a sequence of SEQ ID NO:3, or to a sequence having at least 95% identity with the SEQ ID NO:4.

17) A method of any one of claims **1** to **7**, wherein the expression of at least one gene selected in the group consisting of those encoding for CXCR3, NR1H2, URG4, PARP14, AMPD3, CCDC38, NFU1 and CACNG5 protein is inhibited and confers hypersensitivity to neratinib.

18) A method of claim **17**, wherein said rare-cutting endonuclease has as target at least one of the genes under the NCBI Reference Sequences NM_001142797 (CXCR3 gene), NM_182496 (CCDC38 gene), NM_015700 (NFU-1 gene), NM_001077663 (URG4 gene), NM_017554 (PARP14 gene), NM_000480 (AMPD3 gene), NM_007121 (NR1H2 gene), NM_145811 (CACNG5 gene).

19) A method of claim **17** or **18**, wherein said rare-cutting endonuclease targets a sequence of SEQ ID NO:6-7, 10-11, 18-19, 16-17, 21-23, 20 and 12-13, respectively, or to a sequence having at least 95% identity with the SEQ ID NO: 6-7, 10-11, 18-19, 16-17, 21-23, 20 and 12-13, respectively.

20) The method according to any one of claims **1** to **19**, wherein said immune cell, preferably T cell, expresses a Chimeric Antigen Receptor (CAR).

21) The method according to claim **20**, wherein said chimeric antigen receptor is a CD123+, CD19+, CD22+, CS1+, CD38+, ROR1+, CLL1+, hsp70+, CD22+, EGFRvIII+, BCMA+, CD33+, FLT3+, CD70+, WT1+, MUC16+, PRAME+, TSPAN10+, ROR1+, GD3+, CT83+, mesothelin+.

22) The method according to any one of claims **1** to **21**, wherein said engineered cells in step d) are expanded in-vivo.

23) The method according to any one of claims **1** to **22**, wherein said engineered cells in step d) are expanded in-vitro.

24) The method according to any one of claims **1** to **23**, wherein said immune cells are further inactivated in their genes encoding TCRalpha or TCRbeta, to make them allogeneic.

25) The method according to any one of claims **1** to **24**, further comprising inactivating an immune-checkpoint gene.

26) An isolated human cell made hypersensitive to a specific drug obtainable by the method according to any one of claims **1** to **25**.

27) An isolated human cell according to claim **26**, where said cell is a human primary cell.

28) An isolated human cell according to claim **26** or **27**, where said cell is an immune cell, preferably T cell.

29) An isolated human cell according to any one of claims **26** to **28**, for its use as a medicament.

30) A pharmaceutical composition comprising at least one isolated human cell according to any one of claims **27** to **29** for use in the treatment of cancer, infection or immune disease.

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